What is claimed is:

1. A method of generating an idem-random number, said method comprising the steps of:
   a. Establishing an initial prime number;
   b. Establishing a subsequent prime number identification condition;
   c. Determining a first subsequent prime number satisfying the subsequent prime number identification condition applied to the initial prime number;
   d. Identifying a mathematical relationship to be applied to said initial prime number and said subsequent prime number;
   e. Applying said mathematical relationship to said initial prime number and said subsequent prime number to generate an idem-random number.

2. A method of generating a plurality of idem-random numbers, said method comprising the steps of:
   a. Establishing an initial prime number;
   b. Establishing a subsequent prime number identification condition;
   c. Determining a first subsequent prime number satisfying the subsequent prime number identification condition applied to the initial prime number;
   d. Determining at least one further subsequent prime number satisfying the subsequent prime number identification condition applied to a previously determined subsequent prime number;
   e. Identifying a mathematical relationship to be applied to a plurality of numbers selected from a set of numbers including said initial prime number and said subsequent prime numbers;
   f. Applying said mathematical relationship to a first subset of numbers selected from said set of numbers to generate a first idem-random number;
   g. Applying said mathematical relationship to a second subset of numbers selected from said set of numbers to generate a subsequent idem-random number.

1   3.   A method of generating a plurality of idem-random numbers according to claim 2,

2   wherein said steps d. through g. are repeated to generate a desired number of

3   idem-random numbers.

4

5   4.   A method according to claim 2, further comprising the steps of:

6

7   h. Establishing desired distribution characteristics;

8   i. Determining a distribution operation to be applied to said idem-random

9   numbers to create said desired distribution; and

10   j. Applying said distribution operation to said idem-random numbers to

11   generate specifically distributed idem-random numbers.

12

13   5.   A method according to claim 3, further comprising the steps of:

14

15   h. Establishing desired distribution characteristics;

16   i. Determining a distribution operation to be applied to said idem-random

17   numbers to create said desired distribution; and

18   j. Applying said distribution operation to said idem-random numbers to

19   generate specifically distributed idem-random numbers.

20

21

22   6.   A method of generating an idem-random number, said method comprising the

23   steps of:

24   a. Specifying particular prime-like characteristics to be satisfied;

25   b. Establishing an initial prime-like number which satisfies said prime-like

26   characteristics;

27   c. Establishing a subsequent prime-like number identification condition;

28   d. Determining a first subsequent prime-like number satisfying the

29   subsequent prime-like number identification condition applied to the

30   initial prime-like number;

e. Identifying a mathematical relationship to be applied to said initial prime-like number and said subsequent prime-like number;

f. Applying said mathematical relationship to said initial prime-like number and said subsequent prime-like number to generate an idem-random number.

7. A method of generating a plurality of idem-random numbers, said method comprising the steps of:

a. Specifying particular prime-like characteristics to be satisfied;

b. Establishing an initial prime-like number which satisfies said prime-like characteristics;

c. Establishing a subsequent prime-like number identification condition;

d. Determining a first subsequent prime-like number satisfying the subsequent prime-like number identification condition applied to the initial prime-like number;

e. Determining at least one further subsequent prime-like number satisfying the subsequent prime-like number identification condition applied to a previously determined subsequent prime-like number;

f. Identifying a mathematical relationship to be applied to a plurality of prime-like numbers selected from a set of numbers including said initial prime-like number and said subsequent prime-like numbers;

g. Applying said mathematical relationship to a first subset of numbers selected from said set of numbers to generate a first idem-random number;

h. Applying said mathematical relationship to a second subset of numbers selected from said set of numbers to generate a subsequent idem-random number.

8. A method of generating a plurality of idem-random numbers according to claim 7, wherein said steps d. through g. are repeated to generate a desired number of idem-random numbers.

1 9.   A method according to claim 7, further comprising the steps of:

2

3   h. Establishing desired distribution characteristics;

4   i. Determining a distribution operation to be applied to said idem-random

5   numbers to create said desired distribution; and

6   k. Applying said distribution operation to said idem-random numbers to

7   generate specifically distributed idem-random numbers.

8

9 10.   A method according to claim 8, further comprising the steps of:

10

11   h. Establishing desired distribution characteristics;

12   i. Determining a distribution operation to be applied to said idem-random

13   numbers to create said desired distribution; and

14   j. Applying said distribution operation to said idem-random numbers to

15   generate specifically distributed idem-random numbers.

16

17

18 11.   An apparatus for generating an idem-random number, said apparatus comprising:

19   a. Initial prime number establishment means for establishing an initial prime

20   number;

21   b. Subsequent prime number identification condition means for establishing

22   a subsequent prime number identification condition;

23   c. Determination means for determining a first subsequent prime number

24   satisfying the subsequent prime number identification condition applied to

25   the initial prime number;

26   d. Mathematical relationship identification means for identifying a

27   mathematical relationship to be applied to said initial prime number and

28   said first subsequent prime number;

29   e. Calculation means for applying said mathematical relationship to said

30   initial prime number and said first subsequent prime number to generate

31   an idem-random number.

1

2   12.   An apparatus for generating a plurality of idem-random numbers, said apparatus

3   comprising:

4   a.   Initial prime number establishment means for establishing an initial prime

5   number;

6   b.   Subsequent prime number identification condition means for

7   establishing a subsequent prime number identification condition;

8   c.   First determination means for determining a first subsequent prime

9   number satisfying the subsequent prime number identification

10   condition applied to the initial prime number;

11   d.   Second determination means for determining at least one further

12   subsequent prime number satisfying the subsequent prime number

13   identification condition applied to a previously determined

14   subsequent prime number;

15   e.   Mathematical relationship identification means for identifying a

16   mathematical relationship to be applied to a plurality of numbers

17   selected from a set of numbers including said initial prime number

18   and said subsequent prime numbers;

19   f.   First calculation means for applying said mathematical relationship

20   to a first subset of numbers selected from said set of numbers to

21   generate a first idem-random number;

22   g.   Second calculation means for applying said mathematical

23   relationship to a second subset of numbers selected from said set of

24   numbers to generate a subsequent idem-random number.

25